



Climate change and seafood safety: Human health implications

Author(s): Marques A, Nunes ML, Moore SK, Strom MS
Year: 2010
Journal: Food Research International. 43 (7): 1766-1779

Abstract:

Worldwide, anthropogenic climate change is now a reality and is already affecting the biology and ecology of some organisms, as well as several chemical pathways. Little is known about the consequences of climate change for the food system, particularly seafood, comprising all stages from "farm to fork" (mainly primary production, processing, transport and trading). In this context, the current review aims to elucidate climate change impacts on seafood safety and its human health implications. Both chemical and biological risks are foreseen to impair seafood safety in the future as a consequence of climate change; in particular, toxic metals, organic chemicals residues, algal toxins and pathogens of both humans and marine organisms. However, different species respond differently to such stresses. Public health authorities will face new challenges to guarantee seafood safety and to sustain consumers' confidence in eating seafood in a warmer world.

Source: <http://dx.doi.org/10.1016/j.foodres.2010.02.010>

Resource Description

Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Food/Water Quality, Food/Water Quality

Food/Water Quality: Biotxin/Algal Bloom, Chemical, Chemical, Pathogen, Pathogen

Geographic Feature:

resource focuses on specific type of geography

Ocean/Coastal

Geographic Location:

resource focuses on specific location

Climate Change and Human Health Literature Portal

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease: Marine Toxin Syndrome

Medical Community Engagement:

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content